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A New *Trechisibus* (Coleoptera, Trechinae) from Peru*

With 4 Text-figures

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ABSTRACT A new species of the genus *Trechisibus* is described from Hacienda Urco near Calca in the Department of Cuzco, Peru. It is a member of the group of *T. peruvianus* and seems to be related to *T. chaudoiri* Jeannel. The new name *schmidtii* is given to the trechid in the memory of its collector.

It is believed that the Peruvian mountains must be rich in the apterous species of trechid beetles. This is suggested by the fact that six different species of *Trechisibus* occur at a single locality, Huaráz, in the Department of Ancachz (Jeannel, 1958, pp. 721–732; 1962, pp. 585–594). However, our knowledge is still fragmentary as to the trechid fauna of Peru as compared with those of Chile and other southern countries. Only thirteen species of these beetles have so far been reported from five different localities in the Peruvian Andes, and with one exception (*Oxytrechus cyathiderus* Jeannel, 1954) all these species belong to the genus *Trechisibus*.

Through the courtesy of Dr. Wenzel and Dr. Dybas of the Field Museum of Natural History at Chicago, the present author has had an opportunity of examining three specimens of a *Trechisibus* collected by the late Dr. Karl P. Schmidt at Hacienda Urco near Calca in the northern suburbs of Cuzco, southeastern Peru. Two species of the same genus have already been described from the vicinities of Cuzco. One of them is *T. peruvianus* Jeannel (1927, pp. 26, 55, figs. 410–414; 1958, pp. 728, 730; 1962, pp. 589, 593, figs. 138–142) and the other is *T. nicki* Schweiger (1958, p. 8, fig. 3). The former is the type of its own species-group, while the latter probably belongs to the group of *T. variicornis* (cf. Jeannel, 1962, pp. 587–592, excluding *T. callanganus* Jeannel, 1937). The Hacienda Urco species no doubt falls in the former group, but is specifically distinct from any of its described members. It will be called *Trechisibus schmidtii*, the description of which will be given in the present paper.

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Trechisibus schmidtii S. Ueno, sp. nov.

Length: 4.35–4.60 mm (from apical margin of clypeus to apices of elytra).

Belonging to the group of *T. peruvianus* (cf. Jeannel, 1962, pp. 587, 593–594) and probably close to *T. chaudoiri* Jeannel (1954, p. 7; 1958, pp. 728, 730; 1962, pp. 589, 594) from Maraguié in Peru. Distinguished from that species by the smaller and flatter eyes, transverse pronotum and short prehumeral borders of elytra.

Body fairly short and broad, with small head and relatively long legs; surface glabrous on the dorsal side; inner wings absent. Colour dark brown, shiny; marginal areas of head, suture and apical margin of elytra, and ventral side more or less lighter than the rest of body; palpi, antennae and legs brownish yellow.

Head small, subquadrate and moderately depressed above, with deep entire frontal furrows which are subangulate at middle and moderately divergent in front; both frons and supraorbital areas gently convex, the latter smooth but with a distinct foveole on each side at the root of anterior supraorbital seta; microsculpture distinct, consisting of coarse polygonal meshes; eyes flat though of moderate size, being covered with microscopic pubescence; genae about two-thirds as long as eyes or a little shorter than that, feebly convex and covered with minute pubescence; neck wide, neck constriction sharply marked at the lateral sides; labrum transverse, shallowly but widely emarginate at apex; mandibles fairly long, sharply hooked at apices; mentum free, with a short, broad and bifid tooth in apical emargination; submentum sexsetose; palpi rather thick though with slender subconical apical segments, penultimate segments moderately dilated towards apices; antennae rather short but fairly slender, reaching basal one-third of elytra or shorter than that, with segment 2 about five-sevenths as long as segment 3, which is slightly longer than segment 4 or 5; antennal segments 7–9 more than twice as long as wide.

Pronotum transverse, widest at about four-sevenths from base, and a little more strongly contracted towards apex than towards base; the ratio of the width of pronotum to the width of head 1.48–1.52 (mean 1.49), the ratio of the width to the length of pronotum 1.30–1.33 (mean 1.31); the ratio of the greatest width of pronotum to the width of apex 1.52–1.56 (mean 1.55), that to the width of base 1.28–1.31 (mean 1.30); surface convex at the sides but more or less depressed on the disk; microsculpture distinct, consisting of transverse meshes; sides widely bordered and reflexed, particularly behind middle, moderately rounded in front, less so behind but not sinuate before hind angles, which are very obtuse and narrowly rounded at each corner; each marginal gutter close to side margin inside front angle, but becoming widely distant posteriad and continuing into basal fovea to near basal border; anterior marginal seta situated before the widest part, the posterior close to hind angle; apex either straight or slightly emarginate, with front angles slightly advanced though narrowly rounded; base wider than apex, straight at middle but gently oblique on each side inside hind angle, the ratio of the width of base to that of apex 1.18–1.20 (mean 1.19); median line sharply impressed,

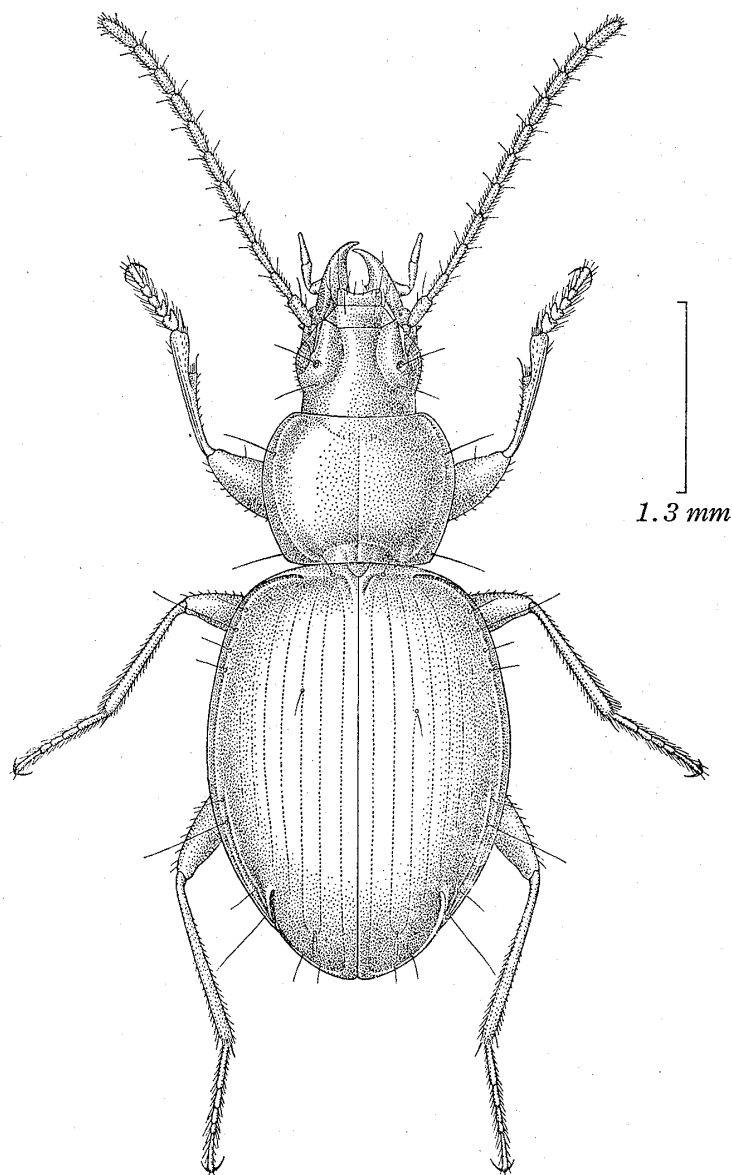


Fig. 1. *Trechisibus schmidtii* S. Uéno, sp. nov., ♂, of Hacienda Urco near Calca.

somewhat widening near base; apical transverse impression shallow though always visible; basal transverse impression usually continuous though shallow at the median part and nearly interrupted in the paratype, continuing on each side to near basal border; basal fovea not large and rather mal-defined, though fairly deep at the posterior parts; basal area more or less uneven, usually with longitudinal striations.

Elytra ovate, widest at about four-ninths from base, well convex at the sides and in apical part but more or less depressed on the disk; the ratio of the width of elytra to that of pronotum 1.54–1.61 (mean 1.58), that of the length to the width

of elytra 1.26–1.34 (mean 1.30); microsculpture sharply impressed, consisting of polygonal meshes which are usually wide; shoulders distinct though rounded; prehumeral borders fairly long and moderately curved, but not subangulate nor reaching the base of stria 4; sides rather widely reflexed, arcuate from shoulders to apices which are rounded, each with a slight preapical emargination; striae shallow, nearly entire though becoming shallower towards the sides, without distinct punctures, stria 8 deeply impressed behind middle; scutellar striole short though distinctly impressed; apical striole long, deep, moderately arcuate and joining stria 5; intervals very slightly convex even on the disk; apical carina prominent, long and sharply keeled; stria 3 with a single setiferous dorsal pore at a level between two-sevenths and one-third from base; preapical pore situated at the apical anastomosis of striae 2 and 3, and almost equally distant from apex and from suture; both internal and external apical pores present; humeral set of marginal umbilicate pores regular.

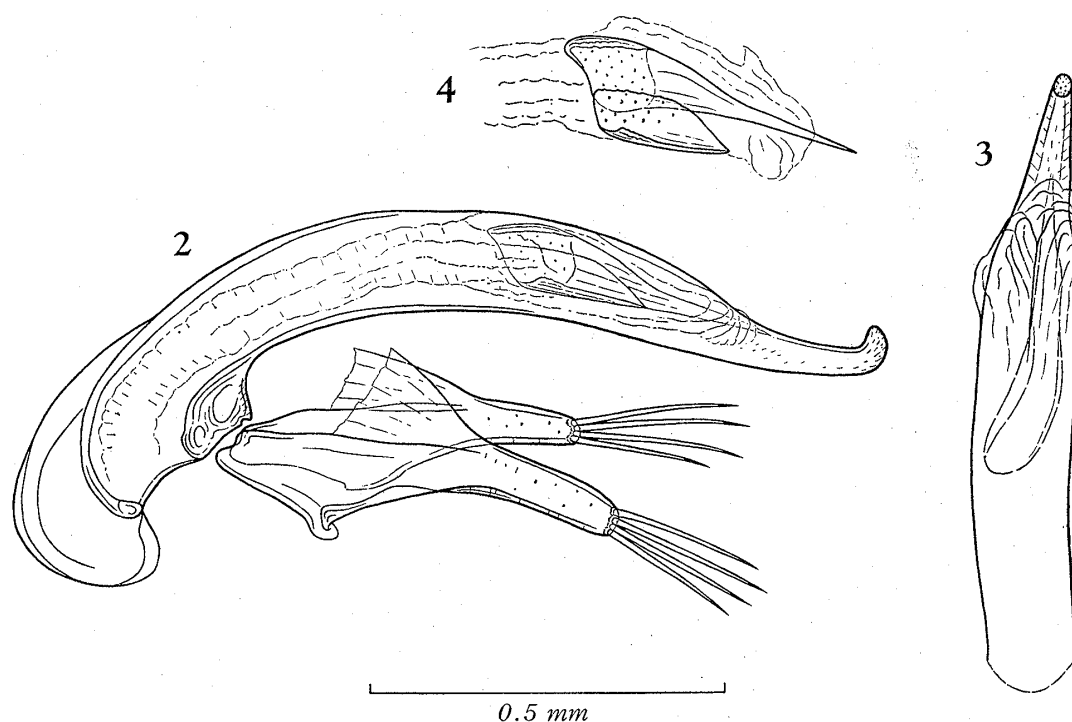
Ventral surface smooth, but covered with microscopic pubescence perceptible only under high magnification; anal sternite provided with a pair of sexual setae in ♂, with two pair of the setae in ♀. Legs relatively long though fairly stout; protibiae straight, moderately dilated towards apices and rather densely pubescent on the anterior face, each with a groove on the external face and also with a very shallow groove along the inner side of the external one; tarsi fairly slender, tarsal segment 4 with a long ventral apophysis in pro- and mesotarsi; in ♂, two proximal segments of each protarsus widely dilated and well produced inwards at apices.

Male genital organ fairly large, elongate and heavily sclerotized. Aedeagus about four-ninths as long as elytra, slender, and regularly arcuate from base to near apex, which is narrowly prolonged and dorsally bent at the extremity; basal part moderately elongate, with a very large, heavily sclerotized sagittal aileron; basal orifice small, with the sides only shallowly emarginate; apical part narrow, gradually tapering apicad and slightly reflexed, with the extremity dorsally bent and ending in a blunt tip. Inner sac armed with two copulatory pieces, of which the left piece is situated in the basal concavity of the right; right copulatory piece spatulate in basal half but projecting into a very long apical spine, with the surface minutely tuberculose near base; left copulatory piece smaller than the right, somewhat spatulate, pointed at apex, and minutely tuberculose on the surface, with the dorsal margin indistinctly serrulate. Styles fairly large, left style larger than the right, each provided with four apical setae.

Type-series. Holotype: ♂, allotype: ♀, paratype: 1♀; Hacienda Urco near Calca, 10,000 ft. alt., Dept. Cuzco, Peru; 18-IX-1939, K. P. Schmidt leg.

The holotype and the allotype are deposited in the collection of the Field Museum of Natural History, Chicago. The paratype is retained in the collection of the National Science Museum, Tokyo.

Notes. According to Jeannel's latest classification of *Trechisibus*, the present species falls in his subgenus *Trechisibiorites* (Jeannel, 1962, pp. 551, 552, 587; type-



Figs. 2-4. Male genitalia of *Trechisibus schmidtii* S. Uéno, sp. nov., of Hacienda Urco near Calca.—2. Left lateral view.—3. Apical part of aedeagus, dorsal view.—4. Separated inner sac, left lateral view; left copulatory piece is removed from the original position.

species: *Trechus ferrugineus* Brullé). However, this subgenus does not seem to be homogeneous, and the name *Trechisibiorites* should be retained only for his "groupe du ferrugineus" (pp. 587, 589, 594-595), which comprises two depigmented species of elongate body form from Bolivia and northern Chile. At present, the author is not in the situation to propose a new subgeneric classification of *Trechisibus*, but a new subgenus had better be erected for the trechids belonging to the species-groups of *T. cyclopterus* and of *T. peruvianus*.

As was already pointed out, *T. schmidtii* belongs to the group of *T. peruvianus*, which was recognized by Jeannel (1958, pp. 727-728; 1962, pp. 587, 593-594) on three Peruvian species. Of these three, *T. peruvianus* Jeannel and *T. ovalis* Jeannel are evidently different from *T. schmidtii* in the structure of male genitalia. The third species, *T. chaudoiri* Jeannel, has been known only by three females, but appears to be closest to the present species. It is to be hoped that future collectings will bring forth male specimens of *T. chaudoiri* and make a genitalic comparison possible.

This new species is dedicated to its collector, the late Dr. Karl P. Schmidt, an eminent scholar in herpetology and ecology, who lost his life on September 26, 1957, at the age of sixty-seven after being bitten by a boomslang snake.

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